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SEQUENCE LISTING

<110> The Brigham and Women's Hospital, Inc.
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 Tamura, Koichi
 Horiuchi, Masatsugu
 Dzau, Victor J.

<120> CNRE Binding Factors and Uses Thereof

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<150> US 60/082,997

<151> 1998-04-24

<160> 23

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cct gat gtt tct cct gat tct gca acg gag ttg tgg aag aca gaa cct      159
Pro Asp Val Ser Pro Asp Ser Ala Thr Glu Leu Trp Lys Thr Glu Pro
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caa gat gca gga gac cag gga ggc aac act tgc atc ctc agg gag gaa      207
Gln Asp Ala Gly Asp Gln Gly Gly Asn Thr Cys Ile Leu Arg Glu Glu
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gcc agg atg ccc cag tca act ggg gtt gct tta ggg ata ggg ttg gag      255
Ala Arg Met Pro Gln Ser Thr Gly Val Ala Leu Gly Ile Gly Leu Glu
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tca gca gag cct aca gcc ctg ctc ccc agg gca gag acc ctc cca gag      303
Ser Ala Glu Pro Thr Ala Leu Leu Pro Arg Ala Glu Thr Leu Pro Glu
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ccg aca gag ctt cgt cca caa aag cgg aaa aag ggc cca gcc ccc aaa      351
Pro Thr Glu Leu Arg Pro Gln Lys Arg Lys Lys Gly Pro Ala Pro Lys
 75                               80                               85

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Met Leu Gly Asn Glu Leu Cys Ser Val Cys Gly Asp Lys Ala Ser Gly

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Phe His Tyr Asn Val Leu Ser Cys Glu Gly Cys Lys Gly Phe Phe Arg				
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cgc agt gtc atc aag gga gca cgc tat gtc tgc cac agc ggt ggc cac				495
Arg Ser Val Ile Lys Gly Ala Arg Tyr Val Cys His Ser Gly Gly His				
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tgc ccc atg gac acc tac atg cgg cgg aaa tgc cag gag tgt cga ctt				543
Cys Pro Met Asp Thr Tyr Met Arg Arg Lys Cys Gln Glu Cys Arg Leu				
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Arg Lys Cys Arg Gln Ala Gly Met Arg Glu Glu Cys Val Leu Ser Glu				
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gaa cag atc cgc ttg aag aaa ctg aag cgg caa gaa gag gaa cag gct				639
Glu Gln Ile Arg Leu Lys Lys Leu Lys Arg Gln Glu Glu Glu Gln Ala				
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caa gcc act tcg gtg tcc cca agg gtg tcc tca cct cct caa gtc ctg				687
Gln Ala Thr Ser Val Ser Pro Arg Val Ser Ser Pro Pro Gln Val Leu				
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Ala Gln Gln Gln Cys Asn Arg Arg Ser Phe Ser Asp Arg Leu Arg Val				
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Thr Pro Trp Pro Ile Ala Pro Asp Pro Gln Ser Arg Glu Ala Arg Gln				
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Gln Arg Phe Ala His Phe Thr Glu Leu Ala Ile Val Ser Val Gln Glu				
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Ile Val Asp Phe Ala Lys Gln Leu Pro Gly Phe Leu Gln Leu Ser Arg				
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Glu Asp Gln Ile Ala Leu Leu Lys Thr Ser Ala Ile Glu Val Met Leu				
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ctg gag acg tca cgg agg tac aac ccc ggc agt gag agc atc acc ttc				1023
Leu Glu Thr Ser Arg Arg Tyr Asn Pro Gly Ser Glu Ser Ile Thr Phe				
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Leu Lys Asp Phe Ser Tyr Asn Arg Glu Asp Phe Ala Lys Ala Gly Leu				
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agg ctg caa cac aca tat gtg gag gcc ctg cac gcc tac gtc tcc atc      1263
Arg Leu Gln His Thr Tyr Val Glu Ala Leu His Ala Tyr Val Ser Ile
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aac cac ccc cac gac cca ctg atg ttc cca cgg atg cta atg aag ctg      1311
Asn His Pro His Asp Pro Leu Met Phe Pro Arg Met Leu Met Lys Leu
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gtg agc ctc cgt act ttg agc agc gtc cat tca gag caa gtg ttt gcc      1359
Val Ser Leu Arg Thr Leu Ser Ser Val His Ser Glu Gln Val Phe Ala
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Asp Val His Glu
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 35           40           45
Gly Val Ala Leu Gly Ile Gly Leu Glu Ser Ala Glu Pro Thr Ala Leu
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 65           70           75           80
Lys Arg Lys Lys Gly Pro Ala Pro Lys Met Leu Gly Asn Glu Leu Cys
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 145 150 155 160
 Met Arg Glu Glu Cys Val Leu Ser Glu Glu Gln Ile Arg Leu Lys Lys
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 Leu Gly Met Ile Glu Lys Leu Val Ala Ala Gln Gln Gln Cys Asn Arg
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 Arg Ser Phe Ser Asp Arg Leu Arg Val Thr Pro Trp Pro Ile Ala Pro
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 370 375 380
 Glu Ala Leu His Ala Tyr Val Ser Ile Asn His Pro His Asp Pro Leu
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 Met Phe Pro Arg Met Leu Met Lys Leu Val Ser Leu Arg Thr Leu Ser
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<210> 8
<211> 763
<212> PRT
<213> Mus musculus

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Val Met Leu Arg Leu Arg Ser Gly Cys Thr Ala His Glu Leu Arg Ile
35      40      45
Pro Cys Cys Ser Ala Val Ala Glu Ala Glu Ala Gly Thr Glu Val Pro
50      55      60
Ala Gly Leu Arg Arg Gly Val Gly Gly Ser Met Asn Gly Ser Gly Gly
65      70      75      80
Gly Gly Gly Ser Asp Leu Ser Trp Ile Pro Gly Pro Gly Gln Gly Leu
85      90      95
Pro Arg Ala Arg Thr Val Tyr Gly Gly Gly Ser Trp Ile Leu Arg Ala
100     105     110
Arg Thr Asp Gly Arg Ala Glu Leu Gly Gly Ala Gly Pro Gly Gly Leu
115     120     125
Gly Pro Glu Ala Arg Arg Ala Gly Ala Gly His Asp Ala Pro Lys Glu
130     135     140
Ala Lys Pro Ser Thr Ala Arg Glu Met Arg Gly Gly Gln Arg Ser Gly
145     150     155     160
Val Arg Gly Leu Glu Pro Gly Gly Thr Gly Val Gly Ser Val Glu Trp
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Ala Gln Val Arg Val Glu Gly Asp Ser Ser Gly Leu Gly Ala Asp Asp
180     185     190
Leu Gly Ser Ser Leu Leu Thr Arg Val Leu Lys Glu Pro Glu Gly His
195     200     205
Arg Val Arg Glu Val Gln Phe Thr Thr Ala Gly Ser Leu Val Arg Ile
210     215     220
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225     230     235     240
Val Asp Thr Glu Asp Ser Phe Asp Glu Gly Pro Gly Ala Leu Val Leu
245     250     255
Glu Ser Asp Leu Leu Leu Gly Gln Asp Leu Glu Phe Glu Glu Glu Glu
260     265     270
Glu Glu Asp Glu Gly Asp Gly His Asn Asp Gln Leu Met Gly Phe Glu
275     280     285
Arg Asp Ser Glu Gly Asp Ser Gln Gly Ala Arg Pro Gly Leu Pro Tyr
290     295     300
Gly Leu Ser Asp Asp Glu Ser Gly Gly Gly Arg Ala Leu Ser Ala Glu
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Ser Glu Val Glu Glu Pro Ala Arg Gly Pro Gly Glu Ala Arg Gly Glu
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Gly Thr Met Pro Arg Arg Ser Glu Asn Ala Leu Ile Leu Pro Asp Leu		480
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<212> DNA

<213> Mus musculus

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<212> DNA

<213> Mus musculus

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<211> 500

- 11 -

<212> DNA

<213> Mus musculus

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<211> 487

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<213> Mus musculus

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<211> 446

<212> DNA

<213> Mus musculus

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<212> DNA

<213> Mus musculus

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<212> DNA
<213> Mus musculus

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gacttgtctt agctcacgta ccagatgagc taagtgatta gggccttgga ttcaccgcca     2220
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<210> 18

<211> 434

<212> PRT

<213> Mus musculus

<400> 18

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              20              25              30
Glu Ser Asp Leu Leu Leu Gly Gln Asp Leu Glu Phe Glu Glu Glu Glu
              35              40              45
Glu Glu Asp Glu Gly Asp Gly His Asn Asp Gln Leu Met Gly Phe Glu
              50              55              60
Arg Asp Ser Glu Gly Asp Ser Gln Gly Ala Arg Pro Gly Leu Pro Tyr
65              70              75              80
Gly Leu Ser Asp Asp Glu Ser Gly Gly Gly Arg Ala Leu Ser Ala Glu
              85              90              95
Ser Glu Val Glu Glu Pro Ala Arg Gly Pro Gly Glu Ala Arg Gly Glu
              100             105             110
Arg Pro Gly Pro Ala Cys Gln Leu Cys Gly Gly Pro Thr Gly Glu Gly
              115             120             125
Pro Cys Cys Gly Ala Gly Gly Arg Gly Gly Gly Pro Pro Leu Pro Pro
              130             135             140
Arg Leu Leu Tyr Ser Cys Arg Leu Cys Ala Phe Val Ser His Tyr Ser
145             150             155             160
Ser His Leu Lys Arg His Met Gln Thr His Ser Gly Glu Lys Pro Phe
              165             170             175
Arg Cys Gly Arg Cys Pro Tyr Ala Ser Ala Gln Leu Val Asn Leu Thr
              180             185             190
Arg His Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Arg Cys Pro His

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	195		200		205	
Cys	Pro Phe Ala Cys Ser	Ser Leu Gly Asn Leu	Arg Arg His Gln Arg			
	210	215	220			
Thr	His Thr Gly Pro Pro	Thr Pro Pro Cys Pro	Thr Cys Gly Phe Arg			
225		230	235			240
Cys	Cys Ala Pro Arg Pro	Thr Arg Pro Pro Ser	Pro Thr Glu Gln Glu			
	245	250	255			
Gly	Thr Met Pro Arg Arg	Ser Glu Asp Ala Leu	Ile Leu Pro Asp Met			
	260	265	270			
Lys	Thr His Ser Gly Glu	Lys Pro Phe Arg Cys	Ala Arg Cys Pro Tyr			
	275	280	285			
Ala	Ser Ala His Leu Asp	Asn Leu Lys Arg His	Gln Arg Val His Thr			
	290	295	300			
Gly	Glu Lys Pro Tyr Lys	Cys Pro Leu Cys Pro	Tyr Ala Cys Gly Asn			
305		310	315			320
Leu	Ala Asn Leu Lys Arg	His Gly Arg Ile His	Ser Gly Asp Lys Pro			
	325	330	335			
Phe	Arg Cys Ser Leu Cys	Asn Tyr Ser Cys Asn	Gln Ser Met Asn Leu			
	340	345	350			
Lys	Arg His Met Leu Arg	His Thr Gly Glu Lys	Pro Phe Arg Cys Ala			
	355	360	365			
Thr	Cys Ala Tyr Thr Thr	Gly His Trp Asp Asn	Tyr Lys Arg His Gln			
	370	375	380			
Lys	Val His Gly His Gly	Gly Ala Gly Gly Pro	Gly Leu Ser Ala Pro			
385		390	395			400
Glu	Gly Trp Ala Pro Pro	His Ser Pro Pro Ser	Val Leu Ser Thr Arg			
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Gly	Pro Ala Ala Leu Gly	Ala Thr Gly Ser Arg	Ala Leu His Ser Asp			
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Ser	Pro					

<210> 19
 <211> 2651
 <212> DNA
 <213> Mus musculus

<400> 19
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 agcctgtcag ctgtgtgggg ggccgacagg tgagggggcc tgttgtgggg caggagggcg 1080
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<210> 20

<211> 539

<212> PRT

<213> Mus musculus

<400> 20

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Met Gly Thr Ala Trp Glu Gly Asp Ser Thr Ser Thr Leu Pro Ser Leu
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20           25           30
Glu Ser Asp Leu Leu Leu Gly Gln Asp Leu Glu Phe Glu Glu Glu Glu
35           40           45
Glu Glu Asp Glu Gly Asp Gly His Asn Asp Gln Leu Met Gly Phe Glu
50           55           60
Arg Asp Ser Glu Gly Asp Ser Gln Gly Ala Arg Pro Gly Leu Pro Tyr
65           70           75           80
Gly Leu Ser Asp Asp Glu Ser Gly Gly Gly Arg Ala Leu Ser Ala Glu
85           90           95
Ser Glu Val Glu Glu Pro Ala Arg Gly Pro Gly Glu Ala Arg Gly Glu
100          105          110
Arg Pro Gly Pro Ala Cys Gln Leu Cys Gly Gly Pro Thr Gly Glu Gly
115          120          125
Pro Cys Cys Gly Ala Gly Gly Arg Gly Gly Gly Pro Pro Leu Pro Pro
130          135          140
Arg Leu Leu Tyr Ser Cys Arg Leu Cys Ala Phe Val Ser His Tyr Ser
145          150          155          160
Ser His Leu Lys Arg His Met Gln Thr His Ser Gly Glu Lys Pro Phe
165          170          175
Arg Cys Gly Arg Cys Pro Tyr Ala Ser Ala Gln Leu Val Asn Leu Thr
180          185          190

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Arg His Thr Arg Thr His Thr Gly Glu Lys Pro Tyr Arg Cys Pro His
 195 200 205
 Cys Pro Phe Ala Cys Ser Ser Leu Gly Asn Leu Arg Arg His Gln Arg
 210 215 220
 Thr His Thr Gly Pro Pro Thr Pro Pro Cys Pro Thr Cys Gly Phe Arg
 225 230 235 240
 Cys Cys Ala Pro Arg Pro Thr Arg Pro Pro Ser Pro Thr Glu Gln Glu
 245 250 255
 Gly Thr Met Pro Arg Arg Ser Glu Asp Ala Leu Ile Leu Pro Asp Leu
 260 265 270
 Ser Leu His Val Pro Pro Gly Gly Ala Ser Phe Leu Pro Asp Cys Gly
 275 280 285
 Gln Leu Arg Gly Glu Gly Glu Ser Leu Cys Gly Thr Gly Ser Glu Pro
 290 295 300
 Leu Pro Glu Leu Leu Phe Pro Trp Thr Cys Arg Gly Cys Gly Gln Glu
 305 310 315 320
 Leu Glu Glu Gly Glu Gly Ser Arg Leu Gly Ala Ala Met Cys Gly Arg
 325 330 335
 Cys Met Arg Gly Glu Ala Gly Gly Val Ala Thr Gly Gly Pro Gln Gly
 340 345 350
 Pro Gly Asp Lys Gly Phe Ala Cys Ser Leu Cys Pro Phe Ala Thr His
 355 360 365
 Tyr Pro Asn His Leu Ala Arg His Met Lys Thr His Ser Gly Glu Lys
 370 375 380
 Pro Phe Arg Cys Ala Arg Cys Pro Tyr Ala Ser Ala His Leu Asp Asn
 385 390 395 400
 Leu Lys Arg His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys
 405 410 415
 Pro Leu Cys Pro Tyr Ala Cys Gly Asn Leu Ala Asn Leu Lys Arg His
 420 425 430
 Gly Arg Ile His Ser Gly Asp Lys Pro Phe Arg Cys Ser Leu Cys Asn
 435 440 445
 Tyr Ser Cys Asn Gln Ser Met Asn Leu Lys Arg His Met Leu Arg His
 450 455 460
 Thr Gly Glu Lys Pro Phe Arg Cys Ala Thr Cys Ala Tyr Thr Thr Gly
 465 470 475 480
 His Trp Asp Asn Tyr Lys Arg His Gln Lys Val His Gly His Gly Gly
 485 490 495
 Ala Gly Gly Pro Gly Leu Ser Ala Pro Glu Gly Trp Ala Pro Pro His
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 Thr Gly Ser Arg Ala Leu His Ser Asp Ser Pro
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 <212> DNA
 <213> Mus musculus

<400> 21
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<210> 22
 <211> 30
 <212> DNA
 <213> Rattus norvegicus

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<210> 23
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<213> Homo sapiens

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